

Bridge Inspection									
Bridge File Number	80965 -1 Bridge				Form Type	SG			
Year Built/Year Supstr	1992/1992				Lot No.	2			
Bridge or Town Name	SPRUCE GROVE				Inspector Name	Wade Nanninga			
Located Over	16:14 L1 27.424;16:14 R1 27.413				Inspector Class	BR CLS A			
Located On	44:00 R1 0.215;44:00 L1 0.225				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	18-Jan-2013			
Legal Land Location	NW SEC 8 TWP 53 RGE 26 W4M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-113:48:31, 53:34:11				Data Entry Date	21-Jan-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA11				Review Date	20-Jan-2013			
Clear Roadway/Skew	19.4 / -21 deg. (LHF)				Dept. Reviewer Name	Brent Herrick			
AADT/Year	7,550 / 2011 (A)				Dept. Review Date	22-Jan-2013			
Road Classification	RAU-209-110				Follow-Up By				
Detour Length (km)	10								
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	CS750						----> Primary Span		

Posting Information													
Required Vert. Clearance Posting (m)		UNDER: 16 L1 5.4m, 16 R1 5.4m											
Posted Vertical Clearance (Y/N)		Yes											
Posted:	Lane	EB	On Bridge (m)	5.3	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.9	In Advance (Y/N)	Yes	
Remarks		Change WB vertical clearance sign to meet "Required VC Posting".											
Required Load Posting (t)		Single		Semi		Truck Train							
Posted Loading (t)		Single		Semi		Truck Train							
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No					
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No					
Remarks		Not required.											

Hazard Marker At Bridge (Y/N)	No												
Remarks	Not required.												
Other Sign Types	Information.												

Utilities (Located at)										
Utility Attachments	POWER UTILITIES-POWER LINE									
Telephone					Gas					
Power					Municipal					
Others	Street lights on parapets.				Problem (Y/N)	No				
Remarks	Street lights on parapets are not grouted at base plates - photo.									

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Sweeping curve on North end and curve on south end - on/off ramps.
Vertical Alignment		7	7	
Roadway Width (m)	19.400			
Approach Bump		6	4	Pot holes @ N approach
Guardrail (Y/N)	Yes			Not thrie beam transition. Radius at corners to accommodate on/off access.
Guardrail		7	7	
Length (m)	57.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		4	4	No concrete drain troughs @ SE/SW, erosion void @ corners - photo.-06-Oct-2010
<b>Approach Road General Rating</b>		<b>7</b>	<b>7</b>	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : <b>WG, 2 Spans, Lengths(m): 42-42, A-Ident Number: A1194-01</b> )					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>					
<b>Now</b>	10.0	0.0	0.0	0.0	
Wearing Surface			6	6	Map cracking in SBL.
(Material Type : <b>ACP - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			4	3	Perpendicular cracks to joints on paving lip at abutments. North joints missing 1 plow deflectors - photo. Old water stains and corrosion of girders at SE corner and North end of G3 due to leaking joints .  Both joints leaking onto abut. seats.
Temperature (deg. C)		7			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
65		S. abut			
70		N. abut			
Deck Drainage			8	8	
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	Typical vertical hairline shrinkage cracks @ 400 o/c on curbs and median. South end of median settled.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		2			
Bridge Rail			9	8	Dirty.
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )					
Bridge Rail Posts			9	8	
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			7	7	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
<b>Girder/Beam</b>					
Cover Plate			X	X	
Flange			9	9	
Web			9	9	
Stiffeners			9	9	
Splice			9	9	
Weld			9	9	
Diaphragms/Cross Frame			9	9	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : <b>WG, 2 Spans, Lengths(m): 42-42, A-Ident Number: A1194-01</b> )				
Paint Condition		6	6	2% of weathering steel has accelerated corrosion. Limited mainly to exterior girder ends at bearing & at leaking joints.
(Colour Description : )				
(Colour Code : )				
Touchup Required (Y/N)	No			
Bearings		8	8	Pier bearings inspected from headslopes.
Temperature (deg. C)	7			
(Expansion Type : <b>REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL</b> )				
(Fixed Type : <b>REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL</b> )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Transverse hairline cracking with efflorescence mainly 3rd bay from East. Transverse cracking under curb cantilever.
Stains (Percent Area)	1			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>6</b>	<b>6</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		6	6	Vertical cracks scaling, typical both abutments.
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		6	6	Vertical cracks with efflorescence both backwalls.
Wingwalls		7	6	
Piles		N	N	
Paint/Coating		5	5	Coating peeling.
Abutment Stability		8	8	
Scour/Erosion		X	X	
<b>Piers/Bents</b>				
(Type : <b>PIER-COLUMN</b> )				Map cracking -narrow.
Bearing Seats/Caps		7	7	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>0</b> )				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	Map cracking. Cap seal. Grey.
(Colour Description : )				
(Colour Code : )				
Pier Stability		9	9	
Scour		X	X	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Substructure General Rating</b>		<b>6</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		9	9	
Traffic Safety Features		9	9	In median only.
Type	Guardrail			
Slope Protection		5	6	South concrete down 60 & out 20. North concrete down 60 & out 25. Mud jacking repairs.
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		5	6	
Drainage		4	4	Water ponding @ toe of North slope - photo.
<b>Grade Separation General Rating</b>		<b>4</b>	<b>4</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013						
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Joints leaking.					
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2013	Fill small erosion @ SW & SE corners of fill, if not done.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION	2013	Improve drainage along North slope protection.					
OTHER ACTION	2013	Replace sheared off plow deflector in abutment joints (1).					
OTHER ACTION	2013	Repair erosion void @ SW & SE corners, consider construct concrete down drain @ SE & SW, if not done.					
OTHER ACTION	2013	Patch pot holes @ N approach.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>66.7/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>53.8/53.8</b>	Est. Repl. Yr	2053	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Monitor accelerated scaling on steel girders.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							

Proposed Action			
Previous Inspector's Name	Shane Hall	Previous Assistant's Name	
Next Inspection Date	18-Oct-2014	Previous Inspection Date	06-Oct-2010
Inspection Cycle (Default) (months)	21		
Comment			